Creation Science
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Beyond the Bare Bones

“Beyond the Bare Bones” is the theme of CSAA’s Creation Weekend October 15 and 16, 2010 with palaeontologist Dr. Marcus Ross. All the events will take place at Mill Woods Assembly, 66 Street and 23 Avenue in Edmonton. Beginning on the Friday evening, October 15, Dr. Ross will share his adventures and experiences when studying geology in large secular universities in the United States. His title is “Twelve Years in Athens: a creationist odyssey in geological education.” (Athens, of course, refers to the secular intellectual environment, as opposed to a Christian environment, which is often represented in such discussions as the City of Jerusalem.) This lecture, certain to provide interesting insights, begins at 8 pm and, like all these events, is free.

by Moxie

On Saturday morning, also at Mill Woods Assembly, a complimentary continental breakfast is scheduled for 10 am. Then at 10:30, Dr. Ross will provide us with a fascinating discussion of “Bird-hipped dinosaurs: horns, helmets and herds.” Later at 1:30 pm he will lecture on “Lizard-hipped dinosaurs: thunder lizards and terrible tyrants”. Lastly, at 8:00 pm, for a change of pace, he will lecture on “How to date like a geologist.” This is a most interesting and relevant topic as the assigned age of rocks is a constant topic of discussion. Since all are free, you are encouraged to invite your friends and relatives.

Come to the Creation weekend with Marcus Ross

CSAA has full colour posters available which we are delighted to provide upon request. Also do not forget to mark your calendar for this exciting event next fall. (See our website for biographical information on Dr. Ross. Among his particular research interests are mosasaurs, fearsome marine reptiles) This weekend is a wonderful opportunity to learn about fascinating fossils and other geological issues!

Seahorse Origin
Baffles Evolutionists

A seahorse (family Syngnathidae, genus *Hippocampus* meaning “horse sea monster”) is like no other animal on earth. It is the only fish that swims upright. It is not just a fish that travels on its tightly curled tail, but its whole body is designed around how it swims. For example, its elaborate balancing mechanism uses an air bubble inside of a specially designed swim bladder to maintain upright posture.

Even when it sleeps, it cannot fall over as it floats vertically in its green watery world guided by a wide rapidly moving pectoral fin located just behind its gills. Sensitive cells at the top of its swim bladder detect when the bubble moves to the wrong place. This movement triggers several complex responses that cause the seahorse to right itself. The common 10 cm (4 ins.) high seahorse moves until the bubble tells it that it is again upright. If the bladder is punctured, the seahorse will sink helplessly to the sea bottom, doomed to die if the wound does not heal rapidly enough.

by Jerry Bergman

Like the strange pygmy sea dragons, seahorses spend much of their

Continued on page 6

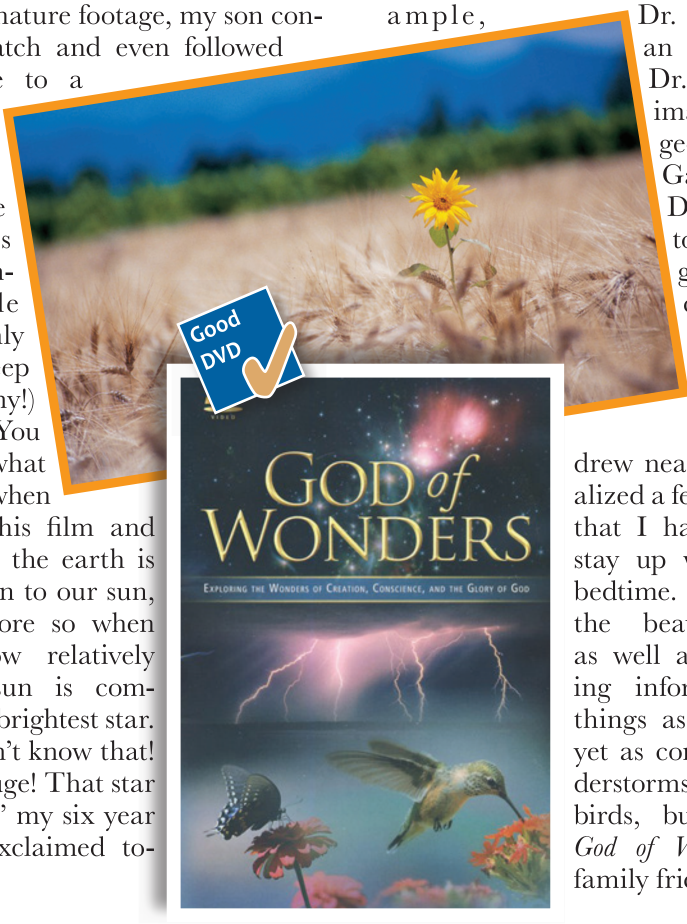
fascinating information about everyday things

Reviewed by Tina Bain

God of Wonders: Exploring The Wonders of Creation, Conscience, and the Glory of God. 85 minutes. Eternal Productions.

One evening, after finishing dish duty and before starting our children's bedtime routine, my husband and I plunked on the couch to catch the first few minutes of the DVD *God of Wonders*. Immediately I was awestruck by aerial footage of mountains and waterfalls, flowers blooming before my eyes through the use of time lapse photography and an impressive variety of wonderful and incredible creatures.

Within moments my 6 year old was also captivated by the music and the marvels of creation that danced before our eyes. Even though the film transitioned from nature footage to a documentary style, which includes scientists explaining some complicated (and fascinating!) details about the creation, interspersed between the nature footage, my son continued to watch and even followed the dialogue to a certain degree. Computer animation made the explanations more understandable and certainly helped to keep their (and my!) attention. You will know what I mean when you watch this film and see how tiny the earth is in comparison to our sun, and even more so when you see how relatively small our sun is compared to our brightest star. "Wow! I didn't know that! The sun is huge! That star is enormous!" my six year old and I exclaimed together.


Good DVD
GOD of WONDERS
Exploring the Wonders of Creation, Conscience, and the Glory of God

This film explores what the creation teaches us about the creator, God. He is God of power. The power and energy present in thunderstorms, for instance, is so immense it teaches us about the greatness of the God who created such a wonder. God is God of Wisdom. The wisdom of the creator, God, is conspicuous in the design of the world. For example, water is perfectly designed to sustain life. The complex design of creatures, such as the hummingbird, is absolutely necessary to sustain life. All the intricate parts need to work together just as they are for life to be possible. Finally the film looks at God as God of Justice and God of Love, and explains the gospel message.

The film weaves together commentary by scientists and scripture verses which together beautifully reveal the glory of God the Creator. The scientists are from a variety of disciplines. For example, Dr. Jason Lisle is an astrophysicist, Dr. Larry Vardiman is an astro-geophysicist, Dr. Gary Parker and Dr. David Menton are biologists. Together, creation and God's Word teach us about God.

As the film drew near the end I realized a few things. First, that I had let my kids stay up way past their bedtime. Second, that the beautiful visuals, as well as the fascinating information about things as everyday and yet as complex as thunderstorms, stars, water, birds, butterflies make *God of Wonders* a very family friendly film!

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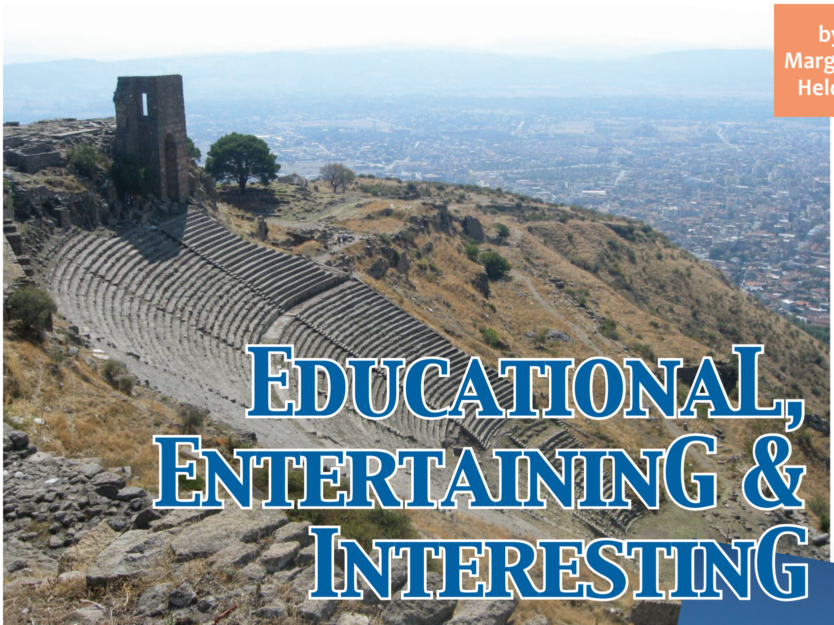


EDUCATIONAL, ENTERTAINING & INTERESTING

by
Margaret
Helder

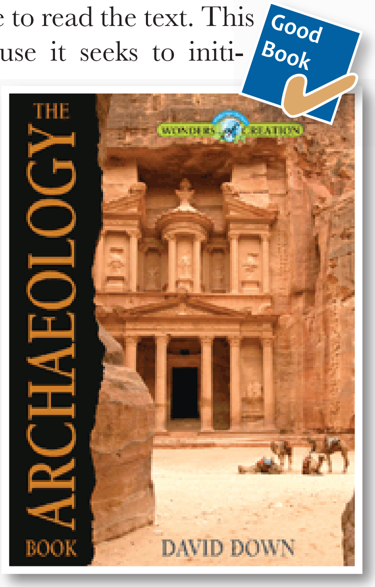
The newest title in the highly successful "Wonders of Creation Series" is *The Archaeology Book* by David Down. Just published in February 2010, this book includes a new multi-age format. Each chapter provides introductory material suitable for grades 5-6, elaboration on the topic which is suitable for grades 7-8, and further details which raise questions concerning controversial issues such as dating techniques. This latter section is provided for grades 9-11 or other interested readers.

Beautifully illustrated with many full colour photographs and illustrations, the book introduces the readers to ancient ruins believed to be the sites where certain Biblical events took place. There are maps, photographs of ancient ruins and other artifacts, first person accounts of visits to some sites, as well as other illustrative drawings. It is impossible not to become excited about the topic!

In his introduction, the author discusses the difficult issue of dating of archaeological sites and the difficulty of compiling a chronological account of when things happened. This is an extremely important question because, as the author points out, an assigned date too old or too recent, could mean that the historical record as read from the ruins, does not match the Biblical account. For example, one expert, by reinterpreting the age of the ruins at Jericho, declared that there was no such city at the time of Joshua! Others, of course, dispute her dating methods. Obviously one has to be very aware of how sites are dated, and this the book describes.

The discussion of the various ancient ruins is organized on a geographic basis. Thus the discussion of sites which were occupied at various times from immediately post flood, to New Testament times, are potentially all included within one chapter (if they all are found in the same region). As one moves from one chapter to the next, it can be difficult to figure out if these next sites are older, or younger or the same age as the sites discussed in the previous chapter. The big five questions discussed for each chapter include "who, what, where, why and how." These are all very interesting issues. However in my opinion, it is a mistake to omit consideration of "when" for the specific sites. A time line provided at the back of the book, would have been helpful for the reader to figure out which Old Testament pagan kings came first and which were later and thus which sites are older than others. Perhaps this could be a good research project for the student, to draw up a suitable time line of events.

At any rate, this new title is certain to be a very helpful addition to the collection of books which seek to educate, entertain and provoke the interest of youthful readers and students. One of the popular features of this series has been the excellent illus-trations which encourage everyone to read the text. This title has more text, because it seeks to initiate interest at a broader range of reading levels. The illustrations however are so cleverly placed, that one hardly notices that one is being asked to read more text!



For students who are interested in Bible/ancient history or just plain adventure, this book is highly recommended.

David Down. 2010. *The Archaeology Book.* Master Books. 96 pages.

Koala

The World's Fav

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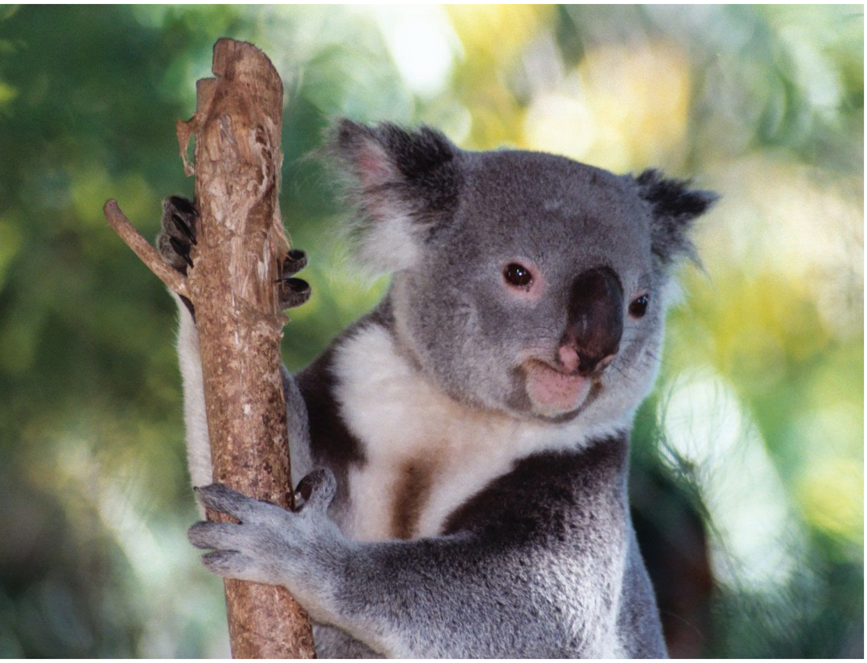
Berg

One of the most popular mammals is the lovable and cuddly koala. Its appearance has given rise to calling them bears, often teddy bears and, although they are not bears but rather marsupials, the name has stuck. Their fluffy ears, large spoon-shaped nose, round body and bright button eyes make them appealing to everyone.

Now existing only in the coastal regions of eastern and southern Australia, they are so enormously different from all other life forms that evolutionists are dumbfounded as to what animal they could possibly have evolved from. Although Koalas are mammals, Order Diprotodontia, they are so different from all other mammals that they are the only members of their own separate family Phascolarctidae, Greek for "pouch bear." Their hands and feet both look like human hands except the koala's hand has three fingers and two thumbs, and its feet three fingers and one thumb! (V. and C. Serventy. 1989. *Koalas.* Chartwell Books p. 10).



Adult koalas weigh about 9 kg (20 pounds), are about 60-78 cm (24-31 inches) long, and have a muscular stumpy tail. They are covered with dense, wooly fur, usually ash gray or chocolate brown in color. Koala's are nocturnal (active at night), arboreal (live in trees), and herbivorous (feed on plants). They live only in eucalyptus forests, and eat only eucalyptus leaves. Koalas spend up to 20 hours a day sleeping, the rest of their time eating.

As mammals, koalas give birth to live young which they breastfeed. As marsupials (Greek for "little purse"), their young, while still in virtually an embryonic state, climb up into a pouch where most of their development occurs. They suckle their infants with milk in their pouch home during most of their early development (Degabriele. in Gould and Gould. 1989. *Life at the Edge.* Freeman p. 84). After about six months the young emerge from their pouch to take their place in the koala colony, rarely venturing very far from their birthplace (Lee and Martin. 1990. *Natural History* August p. 34).

They live almost entirely on the leaves of just 35 of the about 600 known eucalyptus tree species growing in Australia today (Degabriele, 1989, p. 84). Koalas drink hardly any water but instead obtain their moisture from eucalyptus leaves. The koala's thermoregulatory pattern is dependent on water from eucalyptus leaves, and for this reason they are potentially able to thrive in most Australian forests. The volatile oils in this tree are highly toxic to most other animals, but the koala liver effectively detoxifies their enormous eucalyptus meals.

The koala body is composed mostly of protein (including their organs, and muscles), but their diet of eucalyptus oils and cellulose is virtually protein-free. The koala must synthesize the protein required for normal functioning from digestible nitrogen compounds in the eucalyptus leaves. Nitrogen is a critical element needed to synthesize amino acids used to construct protein. A more critical source of their protein is from the many microorganisms that live in the koala's extremely long appendix-like cecum. During normal intestinal movements the koala digests a constant stream of these microorganisms that supply the materials the koala requires to produce the protein required to construct muscle and other protein-based structures.

According to evolutionist Garret Hardin, the challenges of koalas to evolution are many and major. Although the koala is called "a triumph of evolution" by Serventy and Serventy, (1989, p. 10) no evidence exists for its evolution. Scientists do not even know where koalas evolved - they are "one of the mammal mysteries of this southern continent" (1989, p. 9). Until recently the most common claim was that koalas evolved from the wombat 20 million years ago (Lee and Martin, 1990, p. 37). One reason for this conclusion is the wombat's pouch opens backward to protect its young from dirt - the wombat is a digging animal, and the koala's pouch is also backward facing - allowing its young to see the ground as its mother travels around.

Koalas are also considered closely related to the kangaroo, also an animal very different from koalas. So far no potential common ancestor has been identified for either the koalas or the kangaroo. The problem is that koalas are even very different from the animals that biologists conclude they are most closely related to. Wombats live in the ground and kangaroos are morphologically very different diurnal animals that live on grasslands. The conclusion from a study of the 12 extinct species of koala is that it may belong to the wombat group, which is also in a group by itself (Cronin. ed. 1987. *Koala: Australia's Endearing Marsupial.* Reed Books).

Bears
orite Teddy Bear.

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gman

It was once thought that a creature based on part of a skull named *Adelobasileus cromptoni* unearthed in Texas was the ancestor of marsupials. In 2003, though, "the origin of marsupials was turned on its head when" a nearly complete skeleton of a chipmunk sized animal now named *Sinodelphys szalayi* was uncovered in China (Jackson. 2007, *Koala: Origins of an Icon.* Jacana Books p. 5). Although discovered far from Australia, the animal has several marsupial features leading to speculation that *S. szalayi* is the koala ancestor.

Given such fuzzy evidence for koala evolution, speculation abounds about their possible ancestry. This is why Jackson, when adding his own theory to the mix, stated that the koala "appears to have evolved from a group of marsupials now known as diprotodonts" (Jackson, 2007, p. 14). Instead of evolution, the fossils tell us that the "koala is the only living descendant of an entire marsupial suborder, the Phascolarctomorpha (meaning animals shaped like koalas) … a lonely remnant of a once full crown" (Archer and Hand in Cronin.1987. p. 79).

Fossil finds from both South Australia and Queensland have uncovered jaws and teeth that indicate 12 different koala species once existed. Evaluation of this evidence shows only that loss and extinction has occurred, and zero evidence of evolution. This evidence has made the problem of the animal's evolutionary history more difficult:

But, if we consider also the *extinct* groups of marsupials, the picture becomes a little less clear. The diversity of koalas as well as primitive members of other marsupial groups inclines us to be far more cautious about interpretations of the precise relationship between koalas and wombats (Archer and Hand. 1987, p. 79).

The fossils show no hint of evolution, none, only extinction, and degeneration of the koala variety (Philips. 1990. *Koalas: the Little Australians We'd All Hate to Lose.* Australian National Parks and Wildlife Service p. 7) So different are koalas from any other animal that, although some minor traits of the extinct koalas, such as teeth, support the wombat theory, other fossil evidence suggests that koalas "form a third independent order of diprotodont marsupials" (Archer and Hand. 1987, p. 81). As Stahl admits, the origin of the koala, and all of the phalangeroid marsupials for that matter, "is far from solved" (*Vertebrate History: Problems in Evolution.* Dover Publications 1985, p. 441). Evidence cited for koala evolution includes its putative "vestigial" tail. Actually, its thickly padded tail is designed to aid koalas when sitting in trees - which they do for most of their entire lifespan.

Koalas - and all marsupials - are clearly not more primitive then mammals, just very, very different. So advanced is the koala that Serventy and Serventy state it is a triumph of evolution, able to survive and thrive on a diet of gum leaves, not the most nutritious of plants. Its "solution … has made the koala the success story of Australian forests" (1989. p. 10)

In conclusion, the precise relationship of koalas to vombatiform marsupials or any other possible ancestors, remains a mystery (Archer and Hand.1987, p. 82). Furthermore, the most primitive species is not necessarily the oldest in the fossil record, a major problem for evolution theory (Archer and Hand. 1987, p. 91). Koalas are an enigma for evolution, but not for creationists. They are a success story, not of evolution, but of ingenious intelligent design.

Seahorse Origin Baffles Evolutionists

Continued from page 1

time clinging with their monkey-like prehensile tails to the seaweeds and coral around which they live. Many seahorses are not only the same color as weeds, they even look like weeds. They have no need to hide from enemies, though—the seahorse has very few enemies. Its bony plate covering and its bitter taste deter all but the desperately starving.

Seahorses live on plankton, shrimp larvae, and other small sea life by creating a powerful vacuum that sucks up food as it floats by. Seahorses have neither teeth nor a stomach, yet can effectively digest even the hard exoskeleton of their prey (Amanda Vincent.1990. *Natural History* # 12 pp. 34-43 see p. 36).

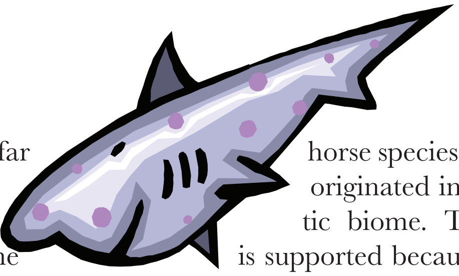
To watch a male seahorse give birth to several hundred tiny seahorses is a unique drama. Mother ceases her part in the reproduction task after she carefully deposits her eggs into dad's kangaroo-like sack. There they are fertilized by the male, and remain for the next forty-five days. As soon as the 300 to 600 new seahorses are born they must rise to the surface to swallow the air they need to fill their swim bladders (J. E. Hartman. 1968. *National Wildlife Magazine* p. 20). Father then looks after them until they are mature enough to forage about on their own. At this time most readily wander off to fend for themselves. Occasionally, one twists its tail around dad and hitches a ride - a beautiful sight to behold.

The design contrast of this little creature with fish is evident even in its incredible eyes. Like the land-dwelling chameleon, the seahorse's eyes can move independently. One eye can look left while the other looks right, an extremely useful design if you cannot move very fast. Whenever a seahorse swims near the surface it can also simultaneously scan both above and below the water—the best of both worlds.

Also, like the chameleon, seahorses can camouflage themselves by changing color to match their surroundings. This allows them to sneak up on, and consume, their small prey with their tubular mouths. In a matter of seconds they can become red, blue, and even yellow, depending on the species. Its bosom can puff up like that of a pouter pigeon, and its colored armor coat will intrigue the most humble of human observers.

Although seahorses are among the world's most fascinating vertebrates, little or nothing is known about their evolution (Vincent, 1990, p. 34). Seahorses have many distinguishing features that make them unique, not just a prehensile tail and the many differences noted above, but also camouflage gills and male brood pouch (P. R. Teske *et al.* 2004. *Molecular Phylogenetics and Evolution*. 30 #2: 261-272).

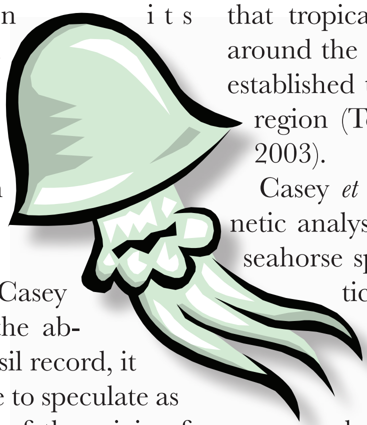
If you can imagine trying to turn any other kind of fish into a seahorse, you will see why no scientist has been able to devise a plausible evolutionary route for its origins. Scientists struggle to explain the evolution and survival advantages for an animal to swim upright. Standing up while swimming



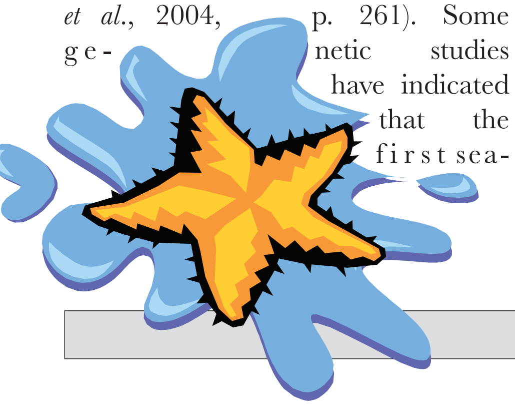
forward makes swimming far more difficult—like a horse without legs in the wrong world. Yet seahorses are one of “the most graceful inhabitants of our seas … extraordinarily elegant” (W. Arrigoni.1989. *Sea Frontiers.* pp. 358-365 see p. 358).

Its uniqueness is also highlighted by the fact that it offers not a single solitary clue as to its evolutionary origin. Evolutionists have dated the oldest seahorse fossils back to Eocene rocks, which they claim date back about 40 million years ago. Yet no evolutionary links are known, and no fish relatives exist that are half typical fish and half seahorse.

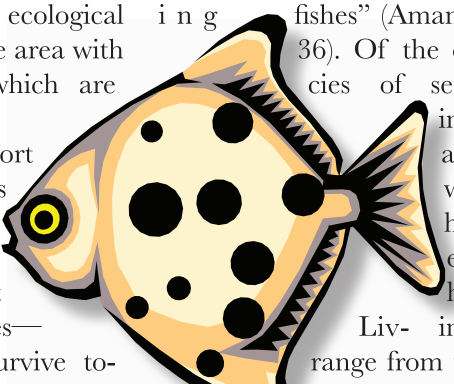
Even its fin design is very different from that of all other fish—unlike other fish it has only one fin, a single wide fin on its back. Considered most closely related to a pipefish, largely because they also incubate their young in a pouch, seahorses are markedly different from pipefish. As Casey *et al.* concludes “in the absence of a reliable fossil record, it has only been possible to speculate as to the time and place of the origin of *Hippocampus*” (*Molecular Phylogentics and Evolution.* 2004. 30 #2: pp. 261-272 see p. 261).



Genetic research on seahorse evolution has not supported any evolutionary theory that explains from where they originally evolved (Casey *et al.*, 2004, p. 261). Some genetic studies have indicated that the first seahorse species could have originated in the Atlantic biome. This theory is supported because the only ancient seahorse fossils ever uncovered were located in Italy, and seahorses are considered most closely related to pipefish, which are believed to have originated in the Atlantic biome. A biome is a major ecological community covering a large area with common characteristics which are determined by climate.



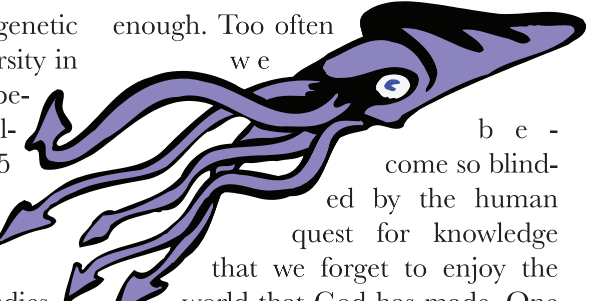
Other studies support the theory that seahorses evolved in the Indo-West Pacific region because this is where the greatest concentration of seahorses—more than 27 species—survive today. A third theory supports the idea that tropical shore species migrated around the Cape of Good Hope and established themselves in the Atlantic region (Teske, Cherry, & Matthee, 2003).

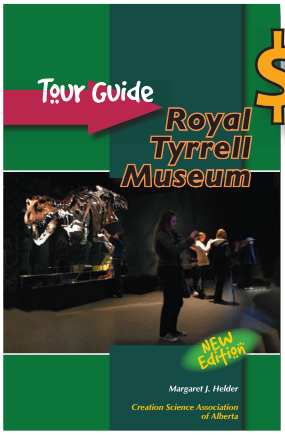


Casey *et al*. (2004) did a phylogenetic analysis of 93 specimens of 22 seahorse species living in the Atlantic and Indo-Pacific Oceans using cytochrome b gene sequence data. Despite a greater number of seahorse species in the Indo-Pacific region than in the Atlantic Ocean, no genetic evidence was found to support the Indo-Pacific origins theory of genus *Hippocampus*. The genetic data suggest that the high diversity in the Indo-Pacific results from speciation events dating from 2 million years ago to as much as 25 million years or even earlier. The results indicate that several species designations need re-evaluating, and further studies are required to determine the patterns of seahorse geographical dispersal.

Seahorses are classified as fish, but Arrigoni calls them “a mixture of two-thirds horse, one-third kangaroo, a bit of monkey, and a pinch of chameleon” (1989, p. 258). No other vertebrate reproduces as does the seahorse. Yet Cambridge University Professor Vincent Amanda noted “from snout to tail, seahorses are surprising fishes” (Amanda, 1990, p. 36). Of the over 35 species of seahorse living in oceans all over the world, none hints at their evolutionary history. Living seahorses range from the half-inch long New Caledonian Seahorse to the 14 inch-long eastern Pacific seahorse, but all are seahorses from head to tail (Amanda, 1990, p. 36). Seahorses are members of the Syngnathidae family, which includes pipefishes, pipehorses, seadragons, and flag-tail pipefishes, yet they are very different even from all of these assumed family members.

The keratin plating which covers the seahorse and all its other unique features are evidence, not of evolution, but of meticulous engineering. Even if it existed for no other reason than for humans to behold its beauty, that would be reason enough. Too often we become so blinded by the human quest for knowledge that we forget to enjoy the world that God has made. One thing is certain—the first known seahorse is a seahorse.





$6.00

Tour Guide: Royal Tyrrell Museum

Margaret Helder

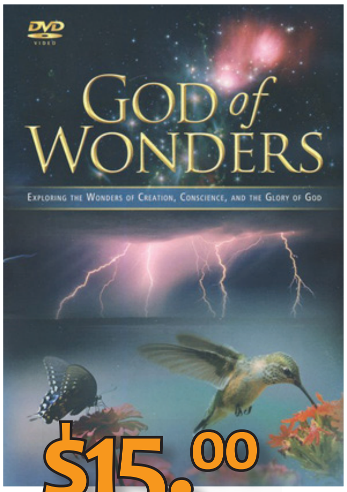
Paper (coil)/56 pages
(shipping only $2.00 when this guide alone is ordered)

As you head out to Drumheller on your holiday travels, do not forget a copy of our creation-based commentary on the exhibits in this famous museum. This fourth edition of the guide covers many new exhibits as well as old favourites.

God of Wonders

Eternal Productions

The whole family will love this new DVD! The marvelous scenes from nature, the Bible verses and the relevant commentary are interesting and inspiring.
85 minutes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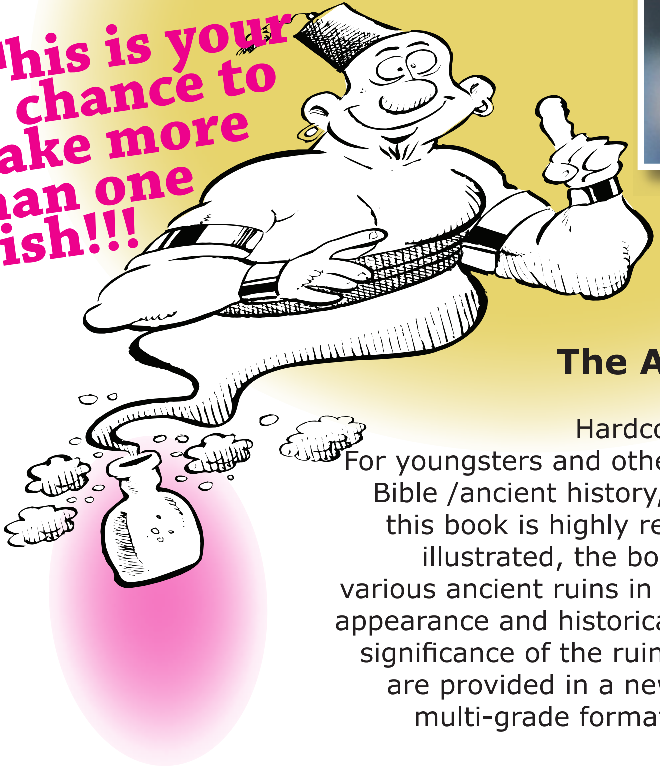
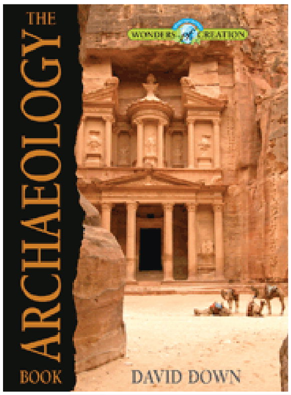


The Archaeology Book

David Down

Hardcover/full colour/96 pages

For youngsters and others who are interested in Bible /ancient history, or just plain adventure, this book is highly recommended. Beautifully illustrated, the book includes discussion of various ancient ruins in the middle east. Current appearance and historical significance of the ruins are provided in a new multi-grade format.



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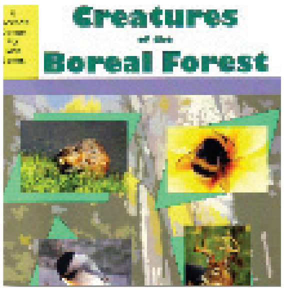

$12.00

Creatures of the Boreal Forest

Tammie Burak

Paper (coil)/76 pages/black and white

What better excuse is there for all of us to get out and learn about some wonderful creatures of the Canadian landscape than with this activity book which asks stimulating questions of upper elementary youngsters and provides interesting discussion. Now is the time to find out the significance of these creatures great and small.

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